REMARKS/ARGUMENTS

Claims 1-3, 5-39, 41-42, 46 and 48-51 remain in the present application, of which claims 1, 22 and 41 are independent. Claims 1 and 41 have been amended herein. Applicants respectfully request reconsideration and allowance of claims 1, 22 and 41.

Rejection of claims 1-3, 5-39, 41-42, 46 and 48-51 under 35 U.S.C. § 102(e)

Claims 1-3, 5-39, 41-42, 46 and 48-51 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,883,670 ("Sporer et al.")

In an exemplary embodiment of the present invention, is provided a system on an integrated circuit chip comprising a system bridge controller having a north bridge function disposed between a CPU and a plurality of peripheral devices for coupling the CPU to the plurality of peripheral devices, wherein the CPU and the plurality of peripheral devices are situated externally to the integrated circuit chip, and wherein the system bridge controller supports delayed read and retry of reads by external masters.

In rejecting claim 1, the Office Action states "Sporer teaches a system on an integrated circuit comprising . . . a system bridge controller for coupling a CPU to a plurality of peripheral devices (figs. 1 and 3), wherein the CPU and the plurality of peripheral devices are situated externally to the integrated circuit chip (col. 3, line 54 to col. 4, line 28)."

Sporer et al. discloses a controller in a digital motion video processing circuit that "directs data flow between an input/output port which transfer a stream of pixel data and to the standard bus. The controller directs data to and from either the standard bus or the input/output port through processing circuitry for compression, decompression, scaling and buffering." (ABSTRACT) However, it is clearly seen in FIG. 1 that the controller 50 is not disposed between a processor 30 and a system 32 (or any other peripheral devices). Further, there is no disclosure in the sections of Sporer et al. cited in the Office Action that the controller 50 has a north bridge function.

By way of example, Sporer et al. discloses that a PCI bridge 34, which is external to the video processing circuit 22, provides a PCI bridge function, and not the controller (for PCI interface) 50. In fact, one of the sections of Sporer et al. (i.e., Col. 3, line 54 to Col. 4, line 28) cited in the Office Action teaches against a system bridge controller having a north bridge function disposed between a CPU and a plurality of peripheral devices as follows: "[t]he computer system includes a processor 30 connected to a system memory 32 via an interconnection mechanism 34. The interconnection mechanism 34 is typically a combination of one or more buses and one or more switches . . . the computer system has a peripheral component interconnect (PCI) bus 36, to which the system memory 32 and processor 30 are connected by a PCI bridge memory controller 34." (Col. 3, lines 57-64, Emphasis Added) As such, Sporer et al. clearly teaches using an external PCI bridge memory

controller 34 disposed between the processor 30 and the system memory 32 to connect them over the PCI bus 36, and not a system bridge controller (on an integrated circuit with an MPEG video decoder, etc.)having a north bridge function disposed between a CPU and a plurality of peripheral devices for coupling the CPU to the plurality of peripheral devices.

The Office Action further states regarding claim 1 that "the system bridge controller supports delayed read and retry of reads by external masters," and cites col. 8, lines 46-56 of Sporer et al. Applicants submit that col. 8, lines 46-56 of Sporer et al. describes an operation of the video processing circuit 22 as a master and as a target. As such, there is no description of the video processing circuit 22 or the controller 50 functioning as a north bridge. Hence, applicants submit that this passage does not disclose that the system bridge controller supports delayed read and retry of reads by external masters (as a north bridge).

Claim 1 has been amended herein to further clarify one of the patentably distinguishable features of the present invention. Claim 1 now recites, in a relevant portion, "[a] system on an integrated circuit chip comprising: . . . a system bridge controller having a north bridge function disposed between a CPU and a plurality of peripheral devices for coupling the CPU to the plurality of peripheral devices, wherein the CPU and the plurality of peripheral devices are situated externally to the integrated circuit chip, and wherein the system bridge controller supports delayed read and retry of reads by external masters." Since Sporer et al. does not teach such a system on

an integrated circuit chip comprising such a system bridge controller having a north bridge function, applicants request that the rejection of claim 1 be withdrawn and that it be allowed.

Since claims 2-3 and 5-21 depend, directly or indirectly, from claim 1, they incorporate all the terms and limitations of claim 1 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 2-3 and 5-21 be withdrawn and that they be allowed.

Claim 22 recites, "[a] method of coupling a CPU to other devices comprising the steps of: coupling the CPU to a plurality of peripheral devices via a system bridge controller having a north bridge function on an integrated circuit chip, wherein the integrated circuit chip is used to process MPEG video data to generate video for displaying and to display the video, wherein the CPU and the plurality of peripheral devices are situated externally to the integrated circuit chip, and wherein the system bridge controller supports delayed read and retry of reads by external masters."

As discussed in reference to claim 1, Sporer et al. does not disclose a system bridge controller having a north bridge function on an integrated circuit used to process MPEG video data. As such, Sporer et al. does not disclose coupling a CPU to a plurality of peripheral devices via such a system bridge controller. Therefore, applicants request that the rejection of claim 22 be withdrawn and that it be allowed.

Since claims 23-39 depend from claim 22, they incorporate all the terms and limitations of claim 22 in addition to other limitations which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 23-39 be withdrawn and that they be allowed.

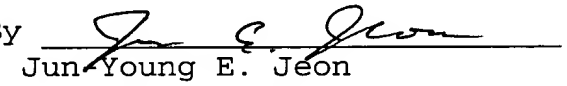
Claim 41 has been amended herein to further clarify one of the patentably distinguishable features of the present invention. Claim 41 now recites, in a relevant portion, "[a] system on an integrated circuit chip comprising: . . . a system bridge controller having a north bridge function disposed between a CPU and a plurality of peripheral devices for coupling the CPU to at least one of the MPEG Transport processor, the MPEG video decoder and the means for displaying the video, and to the plurality of peripheral devices, wherein the CPU and the plurality of peripheral devices are situated externally to the integrated circuit chip, and wherein the system bridge controller supports delayed read and retry of reads by external masters.

As discussed in reference to claim 1, Sporer et al. does not disclose such a system on an integrated circuit chip comprising a system bridge controller having a north bridge function. Therefore, applicants request that the rejection of claim 41 be withdrawn and that it be allowed. Since claims 42, 46 and 48-51 depend from claim 41, they incorporate all the terms and limitations of claim 41 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that

the rejection of claims 42, 46 and 48-51 be withdrawn and that they be allowed.

In view of the foregoing amendments and remarks, applicants respectfully request an early issuance of a patent with claims 1-3, 5-39, 41-42, 46 and 48-51. If there are any remaining issues that can be addressed over the telephone, the Examiner is invited to call applicants' attorney at the number listed below.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 
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